

REMARKS

The last Official Action in the above-identified application has been carefully considered and this amendment has been presented to place this application in condition for allowance. Accordingly, reexamination and reconsideration of this application are respectfully requested.

By this amendment, applicant proposes to amend Figure 7 of the drawings as is indicated in red in the enclosed photocopy. Claims 1, 7, 11, 13, 19 and 25 have been amended. Claims 1-29 remain pending in this application.

In Section 1 of the Official Action, the Examiner contends that Figure 7 should be designated by a legend such as --Prior Art--. By this amendment, applicant proposes to amend Figure 7 of the drawings as is indicated in red in the enclosed photocopy wherein Figure 7 is designated by the legend --Prior Art--. The Examiner's approval of this drawing change is respectfully requested. It is therefore believed that the drawings of this application comply with MPEP §608.02(g).

In Section 2 of the Official Action, claims 1-3, 7-9, 13-15 and 19-21 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Mori et al. (U.S. Patent 5,717,674). The Mori et al. reference relates to an optical pickup apparatus having a three-beam generating diffraction grating 3. Figure 2 of the '674 patent shows that the diffraction efficiencies of the 0th order diffraction light and the $\pm 1^{\text{st}}$ order diffraction lights produced by the three-beam diffraction grating 3 periodically change with respect to the depth of the grooves of the grating formed in the three-beam generating diffraction grating surface.

According to col. 8, lines 54-65 of the '674 patent, the three beam diffraction grating 3 is designed so that the diffraction efficiency of the main beam decreases and the

diffraction efficiency of the sub-beams increases as the wavelength of incident light decreases.

The specification of the '674 patent then states:

For example, the groove depth t of the diffraction grating is formed to about $0.38\mu\text{m}$. Then, the diffraction grating of the 0^{th} order diffraction light for the laser light of wavelength 635nm is about 0.40 and the diffraction efficiency of the 0^{th} order diffraction light of the laser light of wavelength 780nm is about 0.63, which shows that the diffraction efficiency of the 0^{th} order diffraction light for the shorter wavelength is smaller.

The diffraction grating of the $\pm 1^{\text{st}}$ order diffraction lights for the laser light of wavelength 635nm is about 0.22 and the diffraction efficiency of the $\pm 1^{\text{st}}$ order diffraction lights for the laser light of wavelength 780 nm is about 0.15. Thus, the diffraction efficiency for the shorter wavelength is larger.

This section of the '674 patent has been specifically relied upon by the Examiner in the Official Action to reject the claims of this application.

Contrary to the '674 patent's teaching, independent claims 1, 7, 13 and 19 call for the diffraction grating to have a plurality of slits whose depth is preselected such that the efficiency of diffraction of first order light of a first light beam of greater wavelength is higher than the efficiency of diffraction of first order light for a second light beam having a shorter wavelength. With respect to first order light diffraction, col. 8, lines 66 through col. 9, line 4 of the '674 patent calls for exactly the opposite, that is, the diffraction efficiency of the shorter wavelength is greater. It is therefore believed that independent claims 1, 7, 13 and 19 are not anticipated by nor rendered obvious by the teachings of the '967 patent. Since claims 2-3, 8-9, 14-15 and 20-21 are all ultimately dependent upon one of those independent claims, they are believed to be patentably distinguishable as well from the teachings of the '967 patent.

Based upon the foregoing, it is believed that the Examiner's rejection of claims 1-3, 7-9, 13-15 and 19-21 based upon 35 U.S.C. §102(b) has been overcome by the present amendment and remarks and withdrawal thereof is respectfully submitted.

The Examiner has further rejected claims 4-6, 10-12, 16-18, 22-24 and 25-25 under 35 U.S.C. §103(a) as being unpatentable over Mori et al. in view of Brazas, Jr. et al. (U.S. Patent 5,696,749). The Examiner has cited the Brazas, Jr. et al. reference as teaching a housing which receives first and second light sources and a photodetector which detects at least a tracking error signal based on a return light component of the laser light reflected at the optical disc and an optical element placed in an opening of the housing wherein the diffraction grating is disposed on one surface of the optical element. There is no disclosure or suggestion in Brazas, Jr. of a diffraction grating having a plurality of slits whose depth is preselected such that the efficiency of diffraction of first order light of a first light beam of greater wavelength is higher than the efficiency of diffraction of first order light for a second light beam having a shorter wavelength as claimed by applicant in claims 1, 7, 13, 19 and 25 upon which claims 4-6, 10-12, 16-18, 22-14 and 26-29 ultimately depend. Since both the Mori, et al. and Brazas, Jr. references both lack this feature, any conceivable combination thereof would also not teach or suggest applicants' claimed invention of claims 4-6, 10-12, 16-18, 22-24 and 25-29.

It is therefore believed that the Examiner's rejection of claims 4-6, 10-12, 16-18, 22-24 and 25-29 based upon 35 U.S.C. § 103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

In view of the foregoing amendment and remarks, it is respectfully submitted that the application as now presented is in condition for allowance. Early and favorable reconsideration of the application are respectfully requested.

Statements appearing above in respect to the disclosures in the cited references represent the present opinions of the undersigned attorneys and, in the event that the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner indicate those portions of the respective references providing the basis for a contrary view.

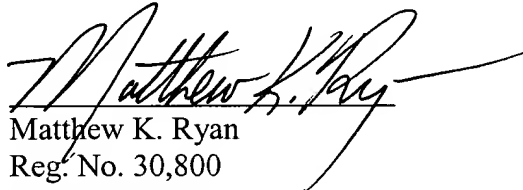
No additional fee is deemed to be required for the filing of this amendment, but if such is, please charge this application to Deposit Account No. 50-0320.

A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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